



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,001	06/03/2002	Yinghui Dan	MONS:130US	7199
46795	7590	09/18/2007		
FULBRIGHT & JAWORSKI, L.L.P. 600 CONGRESS AVENUE, SUITE 2400 AUSTIN, TX 78701			EXAMINER ROBINSON, KEITH O NEAL	
			ART UNIT	PAPER NUMBER
			1638	
			MAIL DATE	DELIVERY MODE
			09/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/064,001

Applicant(s)

DAN ET AL.

Examiner

Keith O. Robinson, Ph.D.

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action mailed March 18, 2005.
2. Claims 1-16 are under examination.

Response to Arguments

Claim Rejections - 35 USC § 102

3. Claim 1 remains rejected under 35 U.S.C. 102(b) as being anticipated by Fry et al (U.S. Patent No. 5,631,152, May 20, 1997). The rejection is repeated for the reasons of record as set forth in the Office Action mailed February 12, 2007. Applicant's arguments, filed July 12, 2007, have been fully considered but are not persuasive.

Applicant argues that the Examiner has failed to make a *prima facie* case for anticipation because the Examiner fails to identify where Fry et al explicitly or implicitly teach all of the elements of claim 1, particularly the use of a multiple bud-inducing media in a method of making transgenic wheat (see page 5, 2nd paragraph to page 6, lines 1-8 of 'Remarks' filed July 12, 2007).

This is not persuasive. Fry et al disclose a method for producing transgenic wheat comprising culturing explants, introducing exogenous DNA via bombardment, transferring cells from a first media to a second media to induce elongation of buds into shoots, harvesting and transferring shoots to a culture medium that promotes root development and culturing transferred shoots to produce plants (see columns 4-5). In addition, Fry et al disclose, "[t]he medium used in this step can be any medium which permits the formation of shoots from the regeneration tissue (see column 4, lines 44-

Art Unit: 1638

45). Furthermore, there is no evidence in Fry et al that discloses that multiple transgenic wheat plants cannot be produced from a single explant.

Claim Rejections - 35 USC § 103

4. Claims 2-16 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Zhou et al (Plant Cell Reports 15: 159-163, 1995), in view of Tegeder et al (Plant Cell Reports 15: 164-169, 1995), further in view of Weeks et al (Plant Physiol. 102: 1007-1084, 1993), still further in view of Cheng et al (Plant Physiol. 115: 971-980, 1997). The rejection is repeated for the reasons of record as set forth in the Office Action mailed February 12, 2007 (see pages 3-5). Applicant's arguments, filed July 12, 2007, have been fully considered but are not persuasive.

Applicant argues that the Examiner has failed to identify any reference that teaches the use of a multiple bud inducing media in a method for transforming wheat and that a teaching regarding culturing of an explant in a bud inducing media is not equivalent to producing a plurality of buds from one explant by use of a multiple bud inducing media (see page 6, last paragraph to page 7, lines 1-17 of 'Remarks' filed July 12, 2007).

This is not persuasive. Zhou et al teach a method for producing a transgenic wheat plant comprising an explant, culturing said explant in a bud inducing media, introducing exogenous DNA via particle bombardment, removing buds and transferring to a media suitable for induction of elongation of buds into shoots, harvesting and transferring said shoots to a media that promotes root development, and culturing the transformed shoots to produce plants (see page 160, first column, paragraphs 1-4). In

Art Unit: 1638

addition, there is no evidence in Zhou et al that discloses that multiple transgenic wheat plants cannot be produced from a single explant in a bud inducing media.

One of ordinary skill in the art would understand that different types of media can be used in culturing of explants. See MPEP 2141.01(a) where it states, "[i]n order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

In the instant case, though Applicant argues that the cited references do not teach a first multiple bud inducing media for inducing production of a plurality of buds from at least one meristem, one of ordinary skill in the art would recognize that the references are relevant to the particular problem with which the invention is involved and that the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem.

5. Claims 1-16 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Fry et al (U.S. Patent No. 5,631,152, May 20, 1997), in view of Eudes et al (U.S. Patent 6,995,016, which is a continuation-in-part of application 09/641,243, filed August 17, 2000). The rejection is repeated for the reasons of record as set forth in the Office Action mailed February 12, 2007 (see pages 6-10). Applicant's arguments, filed July 12, 2007, have been fully considered but are not persuasive.

Applicant argues that there is no teaching in Fry of a method involving placing the explant on a media suitable for regeneration of multiple buds from a single primary

Art Unit: 1638

meristem (see page 7, last paragraph to page 8, lines 1-17 of 'Remarks' filed July 12, 2007).

This is not persuasive. There is no evidence in Fry et al that discloses that multiple transgenic wheat plants cannot be produced from a single explant. One of ordinary skill in the art would understand that different types of media can be used in culturing of explants. See MPEP 2141.01(a) where it states, "[i]n order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

Applicant argues that none of the references of record teach or suggest the surprising and unexpected results obtained with the methods of the instant invention (see page 8, last paragraph of 'Remarks' filed July 12, 2007).

This is not persuasive. None of the references of record, either singularly or combined, teach that multiple transgenic wheat plants cannot be produced from a single explant.

Double Patenting

6. Claim 1 remains rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 7 of U.S. Patent No. 5,631,152. the rejection is repeated for the reasons of record as set forth in the Office Action mailed February 12, 2007 (see page 6). Applicant's arguments, filed July 12, 2007, have been fully considered but are not persuasive.

Applicant argues that there is no teaching in Fry et al of a method involving placing the explant on a media suitable for regeneration of multiple buds from a single primary meristem (see page 9, last paragraph of 'Remarks' filed July 12, 2007).

This is not persuasive. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of said patent read on a method for producing transformed wheat comprising culturing of plant tissue, introducing exogenous DNA, and culturing shoots to produce plants wherein the steps are similar to those of the instant application.

Conclusion

7. No claims are allowed.
8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 1638

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith O. Robinson, Ph.D. whose telephone number is (571) 272-2918. The examiner can normally be reached Monday-Friday, 7:30 a.m. - 4:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached at (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Keith O. Robinson, Ph.D.

September 11, 2007

DAVID H. KRUSE, PH.D.
PRIMARY EXAMINER

